



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

847-608-3131
FAX: 847-608-3139

November 17, 2014

Stateville Correctional Center Public Water Supply
c/o Mr. J. Louch, Acting Chief Engineer
P.O. Box 112
Joliet, Illinois 60434

Re: **Stateville Correctional Center – IL1977910**
2014 Public Water Supply Inspection Report

Dear Mr. Louch:

This letter is in response to your November 6, 2014 letter responding to our recent sanitary survey conducted on September 26, 2014.

We acknowledge that Stateville PWS has immediately corrected the low chlorine residual in your drinking water supply and taken proper measures to adequately respond if such an incident occurs in the future.

We understand that Stateville PWS has already approved cross-connection ordinance and are committed to perform the annual in-house RPZ testing within the next 180 days. However, if this corrective action is not completed by the committed timeline, the Illinois Environmental Protection Agency may issue a formal violation notice pursuant to Section 31(a)(1) of the Act.

I take this opportunity to thank you for your response to our letter. If you have additional questions or comments, please contact me at 847-608-3131.

Sincerely,

S.M.

Shibu Vazha, Environmental Protection Engineer
Elgin Regional Office, Division of Public Water Supplies
Illinois Environmental Protection Agency

cc: Marcus Hardy, Warden
Michael Studer, Water Supply Operator
Elgin File



Illinois
Department of
Corrections

Pat Quinn
Governor

S. A. Godinez
Director

Stateville Correctional Center
Route 53, P.O. Box 112
Joliet, IL 60434

Telephone: (815) 727 -3607
TDD: (800) 526-0844

MEMORANDUM

Date: November 6th 2014

To: Shibu Vazha
Environmental protection Engineer

From: J. Louch
Act. Chief Engineer

SUBJECT: Response Attachment "A" Violations and Deficiencies

Sir,

Corrective Action

A. Some of the free chlorine residual on multiple reports were below 0.2 mg/l.
B. Conversation with Stationary Engineer resulted in better communication with water provider (City Of Crest Hill) and closer monitoring of chlorine residuals immediatly. (Mark Seifert)

A. Statville Correctional Center does not have a cross –connection program
B. The facility adminastration has approved a cross connection policy and our in house certified plumbers will be conducting the annual testing of the RPZ devices and maintain records within the next 180 days.

RECEIVED
REGION 2

NOV 10 2014

Division of Public Water Supplies
State of Illinois
Environmental Protection Agency



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

847-608-3131

FAX: 847-608-3139

October 16, 2014

Stateville Correctional Center Public Water Supply
c/o Mr. Marcus Hardy, Warden
P.O. Box 112
Joliet, Illinois 60434

Re: **Stateville Correctional Center – IL1977910**
2014 Public Water Supply Inspection Report

Dear Mr. Hardy:

An engineering evaluation of the **Stateville Correctional Center** water supply has been completed. Field inspection was made on September 26, 2014 by Mr. Shibu Vazha of this office. Mr. Michael Studer was present during this inspection.

The Illinois Environmental Protection Agency conducts periodic inspections of all community water supplies to determine if their ongoing programs for monitoring, maintaining the water supply, and providing appropriate information to the water users meet the requirements of the Illinois Pollution Control Board's public water supply regulations and related standards. The reason for this work is that if the people in a community are to cooperate and use a common water supply, they must feel that their system is properly constructed, operated and maintained.

Aspects of the water system that may not comply with current standards or regulatory requirements are detailed in attachment "A" of this letter. **Please respond to these findings in writing within 30 days.** Your response should describe the steps that have been, or will be taken, including an estimated date of completion (not to exceed 180 days), to correct these deficiencies.

This letter is NOT a violation notice as specified in Section 31(a)(1) of the Illinois Environmental Protection Act (415 ILCS 5/31(a)(1)). However, if an acceptable response is not received within 30 days, the Illinois Environmental Protection Agency may issue a formal violation notice pursuant to Section 31(a)(1) of the Act.

Stateville Correctional Center - IL 197-7910
October 16, 2014

The Illinois Pollution Control Board Regulations can be downloaded from the internet at www.ipcb.state.il.us. The *Recommended Standards for Water Works* is available from Health Education Services, P.O. Box 7126, Albany, New York, 12224. (Phone 518-439-7286 / FAX 518 - 439-7022). This document may also be purchased through the internet at www.hes.org.

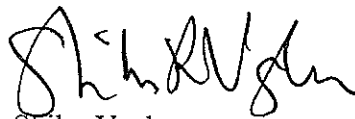
We also request that you review the enclosed "Public Water Supply Data Sheets". Monitoring requirements are determined by the information included on these data sheets, making it vital that you inform us of any errors or other inaccuracies.

We appreciate the cooperation and courtesy extended during this survey. Questions or comments regarding this evaluation should be directed to Shibu Vazha at 847-608-3137.

Very truly yours,



Segundo Nallatan, P.E.
Regional Manager
Division of Public Water Supplies
Illinois Environmental Protection Agency



Shibu Vazha
Environmental Protection Engineer

cc: Michael Studer, Operator, 1330 Elm Drive, New Lenox, IL 60451
Will County Health Department
Illinois State Water Survey

ATTACHMENT "A"

VIOLATIONS AND DEFICIENCIES

The current evaluation of your community water supply indicates that the following conditions appear to violate Title IV of the Illinois Environmental Protection Act 415 ILCS 5/1-57.17 (1999) (The Act), 35 Illinois Administrative Code (35 IAC), the Recommended Standards for Water Works (1982) (Standards) and related standards. A written response outlining corrective action is required to be submitted to this office within 30 days.

1) Technical Capacity – Low Chlorine Residual in the Distribution plus residuals reported were low in many MORs:

Some of the free chlorine residual test results reported in multiple monthly operating reports were below 0.2 mg/l. A minimum required free chlorine residual of 0.2 mg/l or a combined chlorine residual of 0.5 mg/l (total minus free chlorine results) must be maintained in all active parts of the distribution system at all times. Your supply is not in compliance with this requirement. Areas where low chlorine is detected should be flushed frequently, and/or the chlorine feed rate from the parent supply should be increased to maintain adequate chlorine residual. A free chlorine residual of 0.5 mg/l or greater is recommended. (We also like to note that both total and free chlorine residuals taken at the maintenance garage during the inspection yielded 0.1 mg/l and free chlorine residual measured at the water tower yielded 0.13 mg/l.

(The Act, Sections 17 and 18; and 35 IAC Section 653.604(a))

2) Managerial Capacity - Cross-Connection Control Program not Approved:

Stateville Correctional Center does not have a cross connection control program approved by Illinois EPA.

a) Please send a copy of the cross-connection control ordinance and summary outline of your cross connection control program to Dave McMillan, IEPA-BOW-PWS-FOS, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, IL 62794-9276 for Illinois EPA review and approval. *(Guidance material attached)*.

b) Your facility does not have commercial, Industrial and residential backflow devices. But as part of the cross-connection program requirement, the facility must monitor and test all the backflow devices within the premises of your compound on an annual basis by a licensed plumber who holds a Cross Connection Control Device Inspection certificate. RPZ backflow devices must be tested annually, and the facility must maintain records of all tests and locations of all RPZ type backflow devices (including external and internal installations). Develop and implement a plan to address the above cross-connection control program deficiencies.

(The Act, Section 18; and 35 IAC, Sections 653.801 and 653.802)

Illinois Environmental Protection Agency

Bureau of Water - Division of Public Water Supplies

Inspection Report - Elgin Regional Office

FACILITY NAME	Stateville Correctional Center	FACILITY NUMBER	IL1977910	
PLANT PHONE	815-727-3607, x-6567	COUNTY	Will	
INSPECTION DATE	September 26, 2014	INSPECTED BY:	Shibu Vazha	
SEND CORRESPONDENCE TO		EXEMPTION / LABORATORY FEE STATUS		
NAME OR ENTITY	Marcus Hardy	CHLORINE (Date)	No exemption	
ADDRESS	P.O. Box 112			
CITY, STATE, ZIP	Joliet, Illinois 60434	LAB FEE PARTICIPANT (Y/N)	Yes	
CONTACT INFORMATION				
CERTIFIED OPERATOR	Michael Studer	CLASS	B	NUMBER NA
PHONE:	815-727-3607, x-7566	FAX:	815-727-4322	
PAGER:	None	OTHER:	E-mail: none	
OWNER - RESPONSIBLE PERSONNEL	Marcus Hardy	TITLE OR POSITION	Warden	
PHONE:	NA	FAX:	NA	
OTHER CONTACTS	NAME	TITLE OR POSITION	PHONE	
	None			
HOME PAGE ADDRESS	None			
FACILITY STATUS				
Open	x	Critical Review	Restricted Status	Reason
				Date
BRIEF DESCRIPTION OF SYSTEM AND SERVICE AREA				
<p>Stateville Correctional Center PWS is located in Crest Hill, a northwestern Village of Will County, Illinois. This PWS has 18 service connections (buildings) serving approximately 3,500 prisoners and staffs.</p> <p>Primary source of water for this facility is treated ground water obtained under direct pressure from Crest Hill through CC05. A 750K gallon elevated tank floats on this system. This facility does not provide any treatment. The total and free chlorine residuals taken at the maintenance garage during the inspection yielded 0.1 mg/l and free chlorine residual measured at the water tower yielded 0.13 mg/l.</p> <p>This facility also has an emergency interconnection (ground water) with Crest Hill. The facility has a sanitary sewer system. The facility's water distribution system consists of 1,500 ft of ductile iron water distribution mains (12-inches in diameter).</p>				
SERVICE CONNECTIONS				# METERS
NUMBER OF DIRECT SERVICES		18	50% metered	
DIRECT SERVICES OUTSIDE CORPORATE LIMITS				
Residential Customers		NA		
Commercial Customers		NA		
Industrial Customers		NA		
SATELLITE WATER SYSTEMS / INTERCONNECTIONS		FACILITY NUMBER	Source	Customer
Crest Hill (emergency interconnection)		197-0250	x	

ADEQUACY OF SUPPLY											
DATE RANGE		FROM	07/14	TO	06/14	PLANT CAPACITY (MGD)		1.5 MGD *			
LIMITING FACTOR FOR PLANT CAPACITY * Capacity of CC05.											
ANNUAL PUMPAGE (MG)		RAW				FINISHED		193.45			
AVERAGE DAILY (MGD)		RAW				FINISHED		0.53 MGD			
MAX 30 Day Average (MGD)		RAW				FINISHED		0.58 MGD (May & June 2014)			
POPULATION		3,500		Estimated or Census Data		Estimated					
				How was Estimated Population Figured?		Provided by the facility					
AVERAGE DAILY PER CAPITA USAGE:		151 g/p/d		Time to Produce Average Daily (Finished)		8.5 hours					
				Time to Produce MAX 30- Day Average (Finished)		9.3 hours					
CONSECUTIVE CONNECTION SUMMARY											
CC #	Location or Description	Source Name	Source ID	Status (A, I or X)			Aquifer	Current Production (MGD)	GWUDI Eval. (DATE)	Waivers	
										VOC	SOC
CC05	Consecutive Connection w/ Crest Hill	Crest Hill	197-7910	A			Shallow well water	1.5***	NA	NA	NA
Source Use (Disconnected sources, backups, seasonal use, etc)		This CC is the only source of water for the supply. Treated ground water is obtained under direct pressure from Crest Hill through CC05. This facility has no treatment.									
Bacteriological History (Raw water samples)		All clean distribution samples in the past 12 months.									
TREATMENT		Disinfectant Used		Fluoridation Chemical Used		Other Chemical Addition		Other Treatment			
		None		None		None		None			
		Installation Deficiencies						General Condition of Plant			
		1) Cross-connection control program not approved by IEPA. 2) Low chlorine residuals are reported in multiple MOR's.						Satisfactory			
Other Comments regarding this TAP		1) *** Capacity of CC05. 2) This PWS has a hot water re-circulation system which consists of a water softener on stand-by (currently off-line). But this hot water re-circulation system is removed from flow diagram because it uses a plumbing system separate from the drinking water system and therefore, not part of the PWS. 3) The total and free chlorine residuals taken at the maintenance garage during the inspection yielded 0.1 mg/l and free chlorine residual measured at the water tower yielded 0.13 mg/l.						Emergency Power		None	

Service Area / Pressure Zone / Distribution System												
Water Source(s)				Lake Michigan water under direct pressure from Waukegan (CC01)								
Location or Description				Service Area Population		No. of Service Connections		Finished Water Storage (Show Capacities)				
								Ground		Elevated		Hydropneumatic
Stateville Correctional Center Distribution System				3,500		18				750K		
Maximum System Pressure		Location		Minimum System Pressure		Location		Free Chlorine Residual (mg/l)		Location		
63 psi		CC05		56 psi		Far end of the system		0.1 mg/l 0.13 mg/l		Garage Water tower		
Flushing Program				Fire Protection Provided		Current Map Available		Valve Maintenance Program			Notes and Other Observations	
None	Yearly	2 x year	More Often	No	Yes	No	Yes	No Valves	No Program	OK		
		x			x		x			x**	** Valve maintenance is performed as needed. Annual maintenance is recommended, if feasible.	
Operating Reports / Records												
Monthly Reports Being Submitted		Content of Monthly Reports										Notes and Other Observations
		Report for each TAP		Daily Production from Each Well		Daily Measured Residuals		Daily Dosage Calculations				
		Yes	No	Late	Yes	No	Yes	No	Yes	No	Yes	
x			x		NA		x*		NA		* Monthly operating reports are submitted to this office on a timely basis. But low chlorine residual measured in the distribution system plus low chlorine residuals are reported in multiple MOR's. Please see "Attachment A" for details.	
Cross Connection control Ordinance												
Does the system have an ordinance		Date Approved (by IEPA)		Program Enforced		Do Private Wells Exist in the Service Area						
Yes	No			Yes	No	Yes		No				
	x**	Not approved by IEPA**			x**			x***				
												*** If any private wells exist in the service area, the facility should encourage sealing them or enforce RPZ installation to prevent backflow and require annual RPZ inspection by certified CCCDI plumbing inspector.

Monitoring

Bacteriological Summary

Monitoring History (Last 12 Months)				Primary Lab		Phone		FAX			
	Raw	Finished	Distribution								
Number of Samples	0	0	48	Secondary Lab		Phone		FAX			
Number Satisfactory	0	0	48								
Number Invalid	0	0	0								
Number Unsatisfactory	0	0	0								
Fecal / E. Coli. Positive	0	0	0	Coliform Monitoring Plan Approved		All Major Portions of system included in Plan		Chlorine Residuals taken at Sample Sites		Monitoring Free Residual	
				Yes	No	Yes	No	Yes	No	Yes	No
Monitoring Violations	07/13 e-coli MON VN – taken late	MCL Violations	None	x		x		x		x	

Fluoridation Summary (Last 12 months)

TAP No	No. of Samples	Minimum (mg/l)	Maximum (mg/l)	Average	Violations (list months)	Notes and Observations (Fluoridation)
CC05*						*CC05 has adequate fluoride levels because parents supply (Crest Hill) provides supplemental fluoridation.

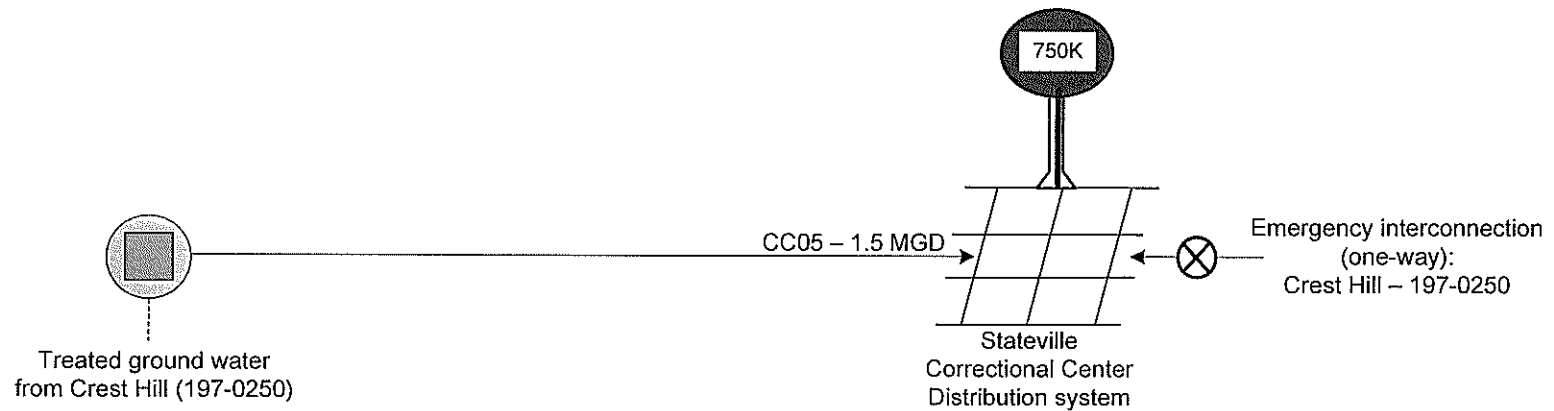
Distribution Based Chemical Monitoring

D/DBP	Distribution: Sample sets from 01/11 to 07/14 show TTHM and HAA5 results within the MCLs of 80 ppb and 60 ppb, respectively.
Pb/Cu	<p>Distribution: Sample results from 01/11 to 07/14 show no lead action level (AL) exceedances.</p> <p>Copper: Most recent sample results from May 13-15, 2014 showed no copper AL exceedances. Note: but sampling results in the past showed copper AL exceedances. Copper sampling results from the past 3 years are reported below:</p> <p>a) 08/11: 4 of 20 samples collected exceeded copper action level of 1.3 mg/l (means only 80% of sample set showed compliance).</p> <p>b) 03/12: 1 of 20 samples collected exceeded copper action level of 1.3 mg/l (means 95% of sample set showed compliance - OK).</p> <p>c) 05/12: 1 of 20 samples collected exceeded copper action level of 1.3 mg/l (means 95% of sample set showed compliance - OK).</p> <p>d) 10/12: 1 of 40 samples collected exceeded copper action level of 1.3 mg/l (means 97.5% of sample set showed compliance - OK).</p> <p>e) 09/13: 4 of 20 samples collected exceeded copper action level of 1.3 mg/l (means only 80% of sample set showed compliance).</p> <p>f) 05/14: 3 of 40 samples collected exceeded copper action level of 1.3 mg/l (means 92.5% of sample set showed compliance - OK).</p> <p>Now the supply is on a lead and copper sampling schedule of once every 6 months. If the 6 months sampling shows compliance, they will go to annual sampling. If the annual sampling shows compliance, they can return to triennial sampling.</p>

Viability / Financial Management			
Service Fee (Minimum Charge)	NA	Other source(s) of income used to maintain the water system	Yes
Direct Charge (cost per 1,000 gallons)	NA	Does the Utility have an ACTIVE program to ensure all customers pay bills?	Yes
Billing Frequency	NA	Does the utility have a fund to cover major repairs?	Yes
ICC Regulated? (Y/N)	No	Name and phone no. of person responsible for system repairs.	Michael Studer
Date of Last Rate Increase	NA	Name and Phone No. of Person Responsible for Financial Management of the Water System	Marcus Hardy
		Major Water Supply Concerns expressed by Residents/ Customers.	None
What was the most recent major repair or Improvement Involving This Water System (Include Dates)			
All water system infrastructures remained the same as in 2011 inspection.			
Planned, Anticipated or Needed Upgrades and Improvements (Include dates or timeframe if known)	Needed improvements: See "Attachment A" for details.		
Deficiencies noted in Attachment "A" in the last inspection (June 28, 2011)			
Deficiencies from last inspection			Corrected (Yes/No)
1) Cross connection control program not approved by IEPA.			No
2) Missing operating permits.			Yes
3) Cross connection at 750K gallon elevated tank.			Yes
Reminders and Recommendations noted in Attachment "B" in the last inspection (June 28, 2011)			
Reminders and Recommendations from last inspection			Corrected (Yes/No)
No "Attachment B" items from last inspection			NA

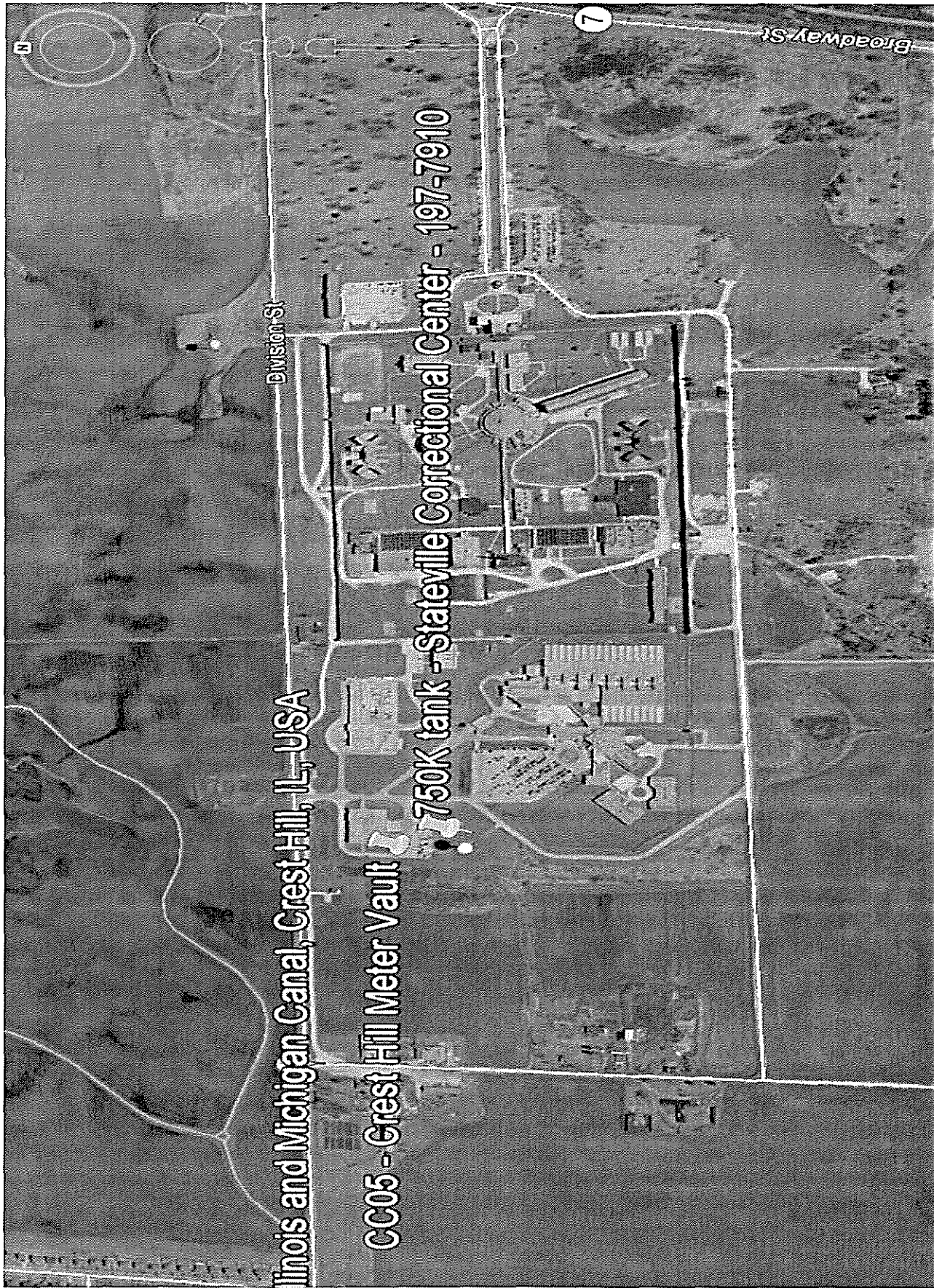
Service connections: 18
Population: 3,500

Public Water System Flow Chart
Stateville Correctional Center 197-7910
October 16, 2014



System facts and changes:

- 1) This PWS has a hot water re-circulation system which consists of a water softener on stand-by (currently off-line). But this hot water re-circulation system is removed from flow diagram because it uses a plumbing system separate from the drinking water system and therefore, not part of the PWS.
- 2) The supply does not provide any chemical treatment.



Illinois and Michigan Canal, Crest Hill, IL, USA

CC05 - Crest Hill Meter Vault

750K tank - Stateville Correctional Center - 197-7910

TECHNICAL CAPACITY

TECHNICAL CAPACITY ASSESSMENT	YES	NO	Does not apply
Record your systems total annual pumpage for the past year: <u>181,596,000</u> (_ MG) (_ gal)			
Record your systems peak day pumpage: <u>600,000 +</u> (_ MGD) (_ gpd)			
List amount of water billed or sold to customers (_ MG) (_ gal)			
Number of customers / population served <u>Approx. 4,000</u>			
List plant capacity <u>See Crest Hill</u> (_ MGD) (_ gpd)			
List total well capacity <u>See Crest Hill</u> (_ MGD) (_ gpd)			
List plant capacity with largest well or treatment unit out of service <u>Crest Hill</u> (_ MGD) (_ gpd)			
Is standby/emergency power equipment exercised?			
Check frequency equipment exercised (<input checked="" type="checkbox"/> weekly) (_ monthly) (_ quarterly) (_ annual) (_ other)			
Can your water system provide uninterrupted water service for 24 hours without electrical power?	X		
Are hydrants routinely flushed and maintained? Flushing frequency: <u>annual</u> <input checked="" type="checkbox"/> spring/ fall <u>as needed</u> <u>51</u>	X		
Are the locations of all valves in the distribution system precisely known?		X	
Are all valves periodically exercised and maintained? List exercising frequency _____		X	
Are locations, size and type of mains and valves detailed on records or maps kept in a secure area?			
Are meter pits and curb stops located, unobstructed and accessible?			X
Is the unaccounted-for water less than 15% of the total water delivered to the mains?			X
List amount of water unaccounted for: _____ % (check if information is not available)			X
Are all customers, water sources and treatment plants metered?			X
List frequency of meters changed/calibrated _____			X
Is your treatment equipment adequate to provide drinking water that meets all drinking water standards?			

MANAGERIAL CAPACITY

MANAGERIAL CAPACITY ASSESSMENT	YES	NO	N/A
Is there a clear plan of organization and control among the people responsible for management and operation of the water system?		X	
Are contingency plans in place for unanticipated loss of key personnel?		X	
Is a written emergency response plan in place and up to date?		X	
Are employees and water system officials encouraged to attend conferences and seminars to stay current with Public Water Supply requirements and technology?	X		
Does the utility perform inspections of work performed on the system by outside contractors?	X		
Are construction permits obtained prior to starting water supply projects that require a permit, and are operating permits obtained before placing those improvements into service?	X		
Do you maintain copies of all water sample results, operating reports and inspection reports?	X		
Do you have a cross connection control program?		X	
Where are cross connection control survey results and record kept? _____			

FINANCIAL CAPACITY

FINANCIAL CAPACITY ASSESSMENT	YES	NO	N/A
Does your organization have an annual budget for operating and maintaining the water system?			
Are water rates regularly reviewed? Date of last rate increase _____			X
Does your water system generate sufficient revenue to meet estimated expenses during the current and forecasted budget years?			X
Are adequate reserve funds in place to provide for emergency repairs?			X
Can your organization cover the costs of an emergency or failure of its most vulnerable system component? (source / storage / treatment etc?)			
Does your organization have a written 5-year Capital Improvement Plan for major water system improvements?			
Are rates sufficient to meet the costs of the 5-year Capital Improvement Plan?			
Does your organization have adopted procedures for selecting outside contractors and suppliers?			

Public Water Supply Name: Stateville Correctional Center ID: IL1977910

Date: Sept. 22, 2014 Prepared by: Michael Stroder

RECEIVED
REGION 2

SEP 22 2014

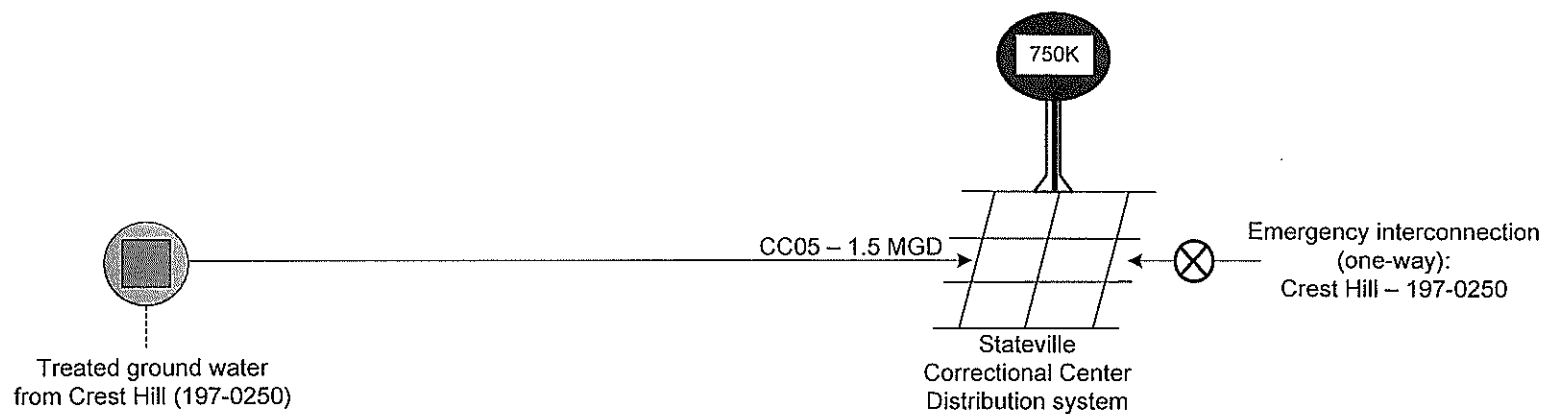
Division of Public Water Supplies
State of Illinois
Environmental Protection Agency

Public Water Supply Inspection Questionnaire

Plant phone number	815 727 3607 Ext. 6567
Name of Village Administrator/Mayor/ Village President (to receive correspondence):	
Title & Address of administrator:	
1) Name of certified operator: 2) Operator class & number: 3) Operator phone: 4) Operator fax: 5) E-mail address (if available): 6) Does the operator have an active contract with the PW facility (Answer only if a private water supply)?	Michael Studer B - 5792-4494 815 727-3607 Ext 7566 815 727 4322 Yes/No
Other contact info (name, title & phone number):	
1) Number of service connections (total): a) Residential connections: b) Commercial (if available): c) Industrial (if available): d) All connections metered?	2 1
Satellite water system (do not include emergency connections):	
Emergency interconnections:	1
Population (explain if estimated or from census data):	
1) Minimum water charges: 2) Charge per 1,000 Gal: 3) Billing frequency:	N/A
Hydrant flushing frequency:	2 times per year Spring & fall
Valve maintenance frequency:	
1) Cross-connection program? 2) Approved by IEPA? 3) Date of approval:	Yes/No Yes/No
Maximum & minimum system pressures & locations:	MAX 68# MINIMUM 56# At base of tower
Water main material, size & length:	
List all elevated tank(s), pressure tank(s) and/or ground storage tanks (include each tanks capacity & cleaning frequency):	1 elevated tank 750,000
Sanitary sewers or septic tanks?	
Any private wells in the service area?	NO Yes/No
Is your supply participant of Community Water Testing or Lab fee program?	Yes/No
ICC regulated? (Answer only if a private water supply)	Yes IEPA Community water supply testing program Yes/No

Service connections: 18
Population: 3,500

Public Water System Flow Chart
Stateville Correctional Center 197-7910
June 30, 2011



System facts and changes:

- 1) This PWS has a hot water re-circulation system which consists of a water softener on stand-by (currently off-line). But this hot water re-circulation system is removed from flow diagram because it uses a plumbing system separate from the drinking water system and therefore, not part of the PWS.
- 2) The supply does not provide any chemical treatment.